



EMCOAT SHIELDING PAINT

CONDUCTIVE COATING FOR ELECTROMAGNETIC SHIELDING




EMCoat is a multipurpose, electrically conductive paint that provides broadband frequency shielding for interior application on walls, ceilings and floors. Fast drying, non-toxic, and water soluble, EMCoat can be applied to a variety of substrates in multiple coats to achieve high shielding effectiveness levels and attenuate signals from multiple sources. Can be over coated with standard paints or other architectural finishes. Perfect for electromagnetic protection in conference rooms, data centers, operations centers, sensitive medical device rooms and any other area where signal control is a concern.



- Water-based, easy cleanup, non-toxic
- Ideal for a wide range of surfaces
- Cost effective performance (\$/dB)
- Covers up to 140 ft² per gallon
- Standard flat grey finish
- Apply by roll, spray or brush



PROVIDES SUPERIOR ELECTROMAGNETIC PROTECTION FROM:

-  EMP, RFI, EMI
-  CELLULAR
-  WIFI
-  GPS, NFC, BLUETOOTH

HACKING



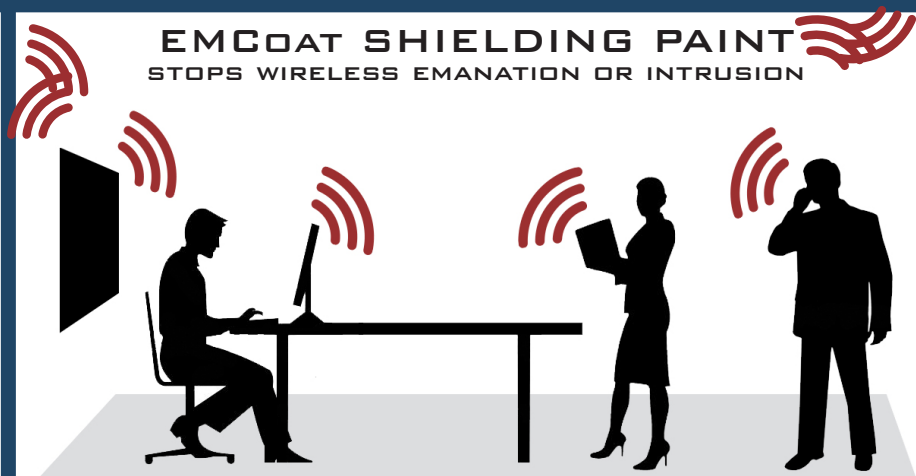
DATA GATHERING



SPECTRUM CONGESTION



EMCOAT SHIELDING PAINT
STOPS WIRELESS EMANATION OR INTRUSION





EMCOAT-4PA067 TECHNICAL INFO

WHERE: For interior use on primed drywall, wood, metal or concrete surfaces. Can be overcoated with standard architectural finishes.

SURFACE PREPARATION: Surfaces should be free of dirt, oil, loose paint, construction debris and other foreign matter. Scuff sand glossy substrates and/or existing paint layers. Surfaces should be primed with compatible primers suitable for adherence to the substrate (latex primers on drywall, self etching primer on metal or concrete, etc). Proper preparation and installation is critical to overall product performance. Caulk or fill all gaps and holes and apply product liberally in corners, as even small voids or inconsistencies in the coating thickness will reduce shielding effectiveness. For large gaps, EMCaulk shielding caulk is recommended for best performance.

COVERAGE: 100-140 ft² per gallon when applied in two coats, depending on surface porosity. Higher shielding levels can be obtained with additional coats.

APPLICATION TEMPERATURE: EMCoat should be applied at temperatures between 50°F and 90°F, and humidity below 85%.

THINNING: Do not thin or dilute.

APPLICATION INSTRUCTIONS: EMCoat can be sprayed, brushed, or rolled. Settling of the conductive components is normal. Mix thoroughly to a uniform consistency immediately before use. Shaking is not adequate and use of a drill and impeller or other mechanical means will be necessary. Take care to scrape all material from the bottom and corners of the container before beginning to use the product. Re-mix material at least every 30 minutes or use an agitator in the bucket to maintain dispersion of the conductive components. Product should be applied in a minimum of two coats to ensure uniform shielding coverage, with a full uniformly spread initial coat, followed by a second application. Apply product liberally in corners or over seams. Uniform and complete coverage is essential for product performance.

Spray: Do not thin product. Strainers and filters must be 30 mesh or larger. To avoid clogging of equipment do not allow product to settle inside of hose or pump.

Recommended tip sizes: HVLP: 2.2 or larger. Airless: 621 or close equivalent.

Roll: A high nap roller (3/4") will achieve the highest distribution of conductive particles and ease of application. Use of shorter nap or microfiber rollers is not recommended.

Brush: Use a high quality synthetic brush and apply product liberally. When brushing or rolling EMCoat, apply generously and do not overwork the product. Watch for and avoid high or low concentrations of conductive solids on the painted surface.

COATS: Two or more coats will achieve the most consistent coverage and best shielding performance. Apply first coat with 50% overlap and cross coat the second coat for best results.

RECOAT TIME: Re-coat when dry to touch.

DRY TIME: Full curing is required to achieve maximum signal attenuation. Allow at least 24 hours before testing product. Additional time may be necessary in high humidity or low temperature conditions.

CLEAN UP: Clean immediately after use with soap and warm water. Clean all equipment according to manufacturers specifications.

DISPOSAL: Dry product can be disposed of with no special precautions.

STORAGE: Store product at room temperature and do not allow to freeze. It is not recommended to store EMCoat products for longer than six months. Product must be remixed immediately prior to application.

PRECAUTIONS:

- Not for exterior use.
- Do not sand.
- Not recommended for use as a finished flooring product. Shielding layer must be protected by a suitable architectural finish product.
- Priming metal with non-conductive coatings can interrupt the electrical connection between the metal and the paint.
- Attachment of mechanical fasteners through shielding layer can have adverse effects upon the efficacy of the shield. Consult a shielding professional for proper installation of fasteners.

GROUNDING: Grounding of conductive surfaces may be required by your local electric code. Please consult with a licensed professional electrician.

BASE: Water-borne Urethane

COLOR: Dark Grey

TOTAL VOC: 111 g/L

VOC: (less exempt solvents): 290g/L

DENSITY: 1452 g/L

VOLUME: .88 gal or 4.3 gal per container

SOLIDS (WT.): 54% +/- 2%

SOLIDS (VOL.): 31% +/- 2%

For complimentary products or consultation to obtain maximum performance of a shielded enclosure, contact Faraday Structures at info@FaradayStructures.com or see www.FaradayStructures.com

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of the Conductive Group. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your company representative to obtain the most current versions of product documentation. The Conductive Group believes this information and test values to be typical, however, the Conductive Group does not assume any liability whatsoever for accuracy or completeness of any information contained in this document. The Conductive Group does not warrant this product with respect to merchantability or suitability for use, including any intellectual property or trade restrictions, which is the sole responsibility of the purchaser and/or end user. Use of products from the Conductive Group requires compliance with the Conductive Group Standard Terms and Conditions. Always refer to materials handling instructions and safety documentation when using this or any other material. Copyright ©2020 Conductive Group, LLC

LEAD WARNING: Warning! Removal of pre-existing paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

M-015: REV 2